AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-10. (Canceled)

11. (Currently amended) A method of uniquely identifying instantiations of functionally equivalent circuits comprising:

expressing ~~representing~~ small manufacturing tolerance related-differences between particular instantiations of the functionally equivalent circuits in terms of ~~as~~ a plurality of multi-bit numbers, each multi-bit number being associated with a particular gate or a group of gates of an instantiation of said functionally equivalent circuits;

determining said multi-bit numbers for a particular instantiation of said functionally equivalent circuits, said multi-bit numbers serving to uniquely identify said particular instantiation of said functionally equivalent circuits from other instantiations of said functionally equivalent circuits;

storing the multi-bit numbers for said particular instantiation of said functionally equivalent circuits;

installing said particular instantiation of said functionally equivalent circuits in an ~~particular~~ item of equipment; and

~~thereafter~~ testing said ~~particular~~ item of equipment for a presence of said particular instantiation of said functionally equivalent circuits in said ~~particular~~ item of equipment by determining said multi-bit numbers for the particular instantiation of said functionally equivalent circuits in said ~~particular~~ item of equipment and comparing the results of said ~~last-mentioned~~ determination of said multi-bit numbers with the stored multi-bit numbers corresponding to the particular instantiation of said functionally equivalent circuits originally installed in said ~~particular~~ item of equipment.

12. (Original) The method of claim 11 wherein said instantiations of functionally equivalent circuits each comprise a separate instantiation of an integrated circuit device.

13. (Original) The method of claim 12 wherein each multi-bit number is associated with a gate or a group of gates, said gate or group of gates being functionally configured by an analog control or configuration signal generated by a DAC responsive to the multi-bit number associated with said gate or group of gates.

14.-16. (Canceled)

17. (New) The method according to claim 11, wherein the functionally equivalent circuits are digital circuits.

18. (New) The method according to claim 11, wherein the multi-bit numbers are parameters selected from the group consisting of voltage parameter, pressure parameter, load parameter, current parameter, and frequency parameter.

19. (New) The method according to claim 11, wherein the small manufacturing tolerance related-differences between particular instantiations of the functionally equivalent circuits are chip-to-chip variations and within-chip variations.

20. (New) The method according to claim 11, wherein the expressing and the testing are conducted at a controlled temperature.

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